

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
NEEDLES FIELD OFFICE**

ENVIRONMENTAL ASSESSMENT

1. CONTROL NUMBER:

CA-690-EA04-27

2. CASE FILE/SERIAL NUMBER:

4700

3. PROPONENT:

Bureau of Land Management, Needles Field Office

4. PROJECT:

Clark Mountain Herd Area Burro Removal, Fiscal Years 2006 - 2011

5. LOCATION: (Also see map Appendix A)

Map ID	Township	Range	Section
T1	17N	14E	13
T2	17N	14E	13
T3	17N	14E	14
T4	17N	14E	12
T5	17N	14E	23
T6	17N	14E	35
T7	16N	14E	31
T8	15 1/2N	14E	18
T9	15 1/2N	14E	19
T10	15 1/2N	14E	19
T11	15 1/2N	14E	19
T12	16N	12 1/2E	13
T13	16N	12 1/2E	13
T14	16N	12E	22
T15	16N	12E	22
T16	16N	12E	22
T17	16N	11E	24
T18	15N	11E	2
T19	15N	10E	2
T20	15N	10E	14
T21	16N	10E	24
T22	16N	10E	21
T23	17N	11E	32

T24	17N	11E	35
T25	17N	11E	24
C1	18 1/2N	12 1/2E	1
C2	18N	13E	8
C3	18N	13E	23
C4	17N	15E	7
C5	17N	15E	24
C6	16N	14E	11
C7	17N	15E	18
C8	17N	12E	17
C9	16N	12E	18
C10	16N	10E	24

6. AFFECTED ACREAGE:

75,349 acres Clark Mountain Herd Area vicinity
20 acres (< 1 acre disturbance per capture site)

7. 7.5' QUADRANGLE:

Clark Mountain, East of Kingston Peak, Halloran Springs, Ivanpah Lake, Kingston Spring, Mesquite Lake, Mesquite Mountain, Mescal Range, Mineral Hills, Pachalka Spring, Stateline Pass, Solomons Knob, Turquoise Mountain, and Valley Wells.

8. MULTIPLE-USE CLASS:

Limited and Controlled.

9. LAW ENFORCEMENT SECTOR:

96

10. LAND STATUS:

Public (Bureau of Land Management)

11. SPECIAL DESIGNATION AREA:

California Desert Conservation Area (CDCA); Ivanpah Desert Tortoise Critical Habitat; Shadow Valley Desert Wildlife Management Area; Hollow Hills, Kingston Range, Stateline and Mesquite Wilderness Areas

12. AUTHORITY

43 United States Code (U.S.C.) 1701, 1711, 1712 and 1734 (Federal Land Policy and Management Act of 1976); 16 U.S.C. 1331-1340 (Wild Free Roaming Horse and Burro Act of 1971); 43 U.S.C. 1901-1908 (Public Rangelands Improvement

Act of 1978); 16 U.S. C. 1131-1136 (Wilderness Act); and, 16 USC 410aaa (California Desert Protection Act)

13. LAND USE PLAN CONFORMANCE AND RELATED ENVIRONMENTAL DOCUMENTS:

Land Use Plan Conformance:

The proposed action is subject to and in conformance with the Bureau of Land Management (BLM) CDCA Plan of 1980, as amended through the Northern and Eastern Mohave Desert Coordinated Management (NEMO) Plan of 2002, in accordance with Title 43 Code of Federal Regulations 1610.5-3.

The CDCA Plan's Multiple Use Class guideline for Controlled (wilderness) and Limited Use areas provides that populations of wild and free-roaming horses and burros will be maintained in accordance with the Wild and Free-Roaming Horse and Burro Act of 1971, but will be subject to controls to protect sensitive resources as provided for in management plans for wilderness areas.

The CDCA Plan's Wild Horse and Burro Element Goal 3 provides that all wild horses and burros from areas not designated for retention and excess wild horses and burros from designated retention areas will be removed.

The Northern and Eastern Mojave Desert Coordinated Management Plan (NEMO) amending the 1980 CDCA Plan eliminated the Clark Mountain Herd Management Area for the management of wild burros.

Related Environmental Documents:

Clark Mountain Herd Management Area Burro Management (CA-069-EA5-14) Decision Record, issued July 18, 1996 authorized removal of access burros from the Clark Mountain Herd Management Area (HMA) up to an Appropriate Management Level (AML) of 44 burros.

14. PURPOSE AND NEED FOR PROPOSED ACTION:

The purpose of the proposed action is to remove wild and free-roaming burros from the Clark Mountain Herd Area (HA). The burro population is presently estimated to total between 100 to 150. Implementation of the proposed action would meet the land management goals outlined in the CDCA Plan (1980) as amended by the 2002 NEMO plan amendment, which eliminated the 75,349 acre Herd Management Area (HMA) and reduced the Animal Management Level (AML) from 44 burros down to zero. The elimination of the Clark Mountain burro population was based on two factors:

Burro removals have been conducted continuously from 1985 through 2003, where a total of 825 burros have been removed. A majority of these animals relied on range improvement waters from the Valley Wells Cattle Allotment. The allotment was transferred to lessee who intends to voluntarily relinquish the allotment. No cattle are grazing on the allotment and the range improvement waters have been turned off. With an estimated annual recruitment rate of 15% for the remaining estimated 100 burros occupying the eastern portion of the Clark Mountain herd area, it is estimated that the population would grow up to 400 burros within the next 10 years and up to 805 burros in the next 15 years.

1. The U.S. Fish and Wildlife Service (USFWS) listed the Mojave population of the desert tortoise (*Gopherus agassizii*) as a threatened species in 1990 (55 FR 12178 - 12191). Critical habitat for the desert tortoise was designated by the U. S. Fish and Wildlife Service in 1994. The NEMO plan amendment (Bureau of Land Management 2002) established Desert Wildlife Management Areas (DWMA) to aid in the recovery of the desert tortoise. The Desert Tortoise Recovery Plan (U.S. Fish and Wildlife Service 1994) included recommendations that grazing by feral ("wild") burros be prohibited in DWMA's. Thirty-eight percent of the Clark Mountain Herd Management Area is within the Shadow Valley DWMA. In response to the Recovery Plan's recommendation, the NEMO Plan amendment reduced the Appropriate Management Level (AML) for the Clark Mountain Herd Area from 44 to 0 burros. The impacts of substantially removing burros from the Clark Mountain HA and surrounding area, was analyzed in the biological opinion (BO) for the California Desert Conservation Area Plan as amended (1-8-04-F-43R). According to the BO, the vast majority of adverse effects that burros have on desert tortoises and their critical habitat would be eliminated from this area by removing the burros. The BO summarized that "removal of burros from this area constitutes an important action to promote the survival and recovery of the desert tortoise."
2. The 1994 California Desert Protection Act transferred the Clark Mountain proper (37,000 acres), to the National Park Service in the creation of the Mojave National Preserve. This transferred the only springs which have yearlong surface water in the in the eastern portion of the HA to the National Park Service. The burros in this area are dependant upon the springs for their survival. The National Park Service's General Management Plan for the area prescribes complete removal of burros from the Mojave National Preserve, and if the BLM is to maintain an HMA, the NPS would fence their boundary to preclude burros from access, and thus their ability to get water.

15. PROPOSED ACTION AND ALTERNATIVES:

15.1 Proposed Action:

The Bureau of Land Management, Needles Field Office proposes to capture all wild burros populating the Clark Mountain Herd Area and adjacent areas, (including burros on public land south and east of Mountain Pass), estimated to total 150 burros. Removal activities described in the Bureau of Land Management, Needles Field Office Capture Plan for Wild Burros for the Clark Mountain Herd Area Fiscal Years 2007-2012, may be conducted at any time within the next five years to move towards the management level of zero burros. The removed burros would be transported to BLM's Ridgecrest, California Wild Horse and Burro Holding and Adoption Facility where they would be placed into the BLM's National Adoption Program. The proposed project would be conducted in conjunction with the BLM, Ridgecrest Field Office.

The proposed action would begin in Fiscal Year 2007 and continue until the objectives are met, or there is a change in land use decisions, or new and pertinent information requiring re-evaluation of the capture plan and associated environmental assessment occurs. At the end of fiscal year 2012, the capture plan and environmental assessment would be re-evaluated for adequacy and for any required updates. The first phase of this operation is planned to begin in the winter of 2007.

General Methodology:

The proposed action would utilize two methods of capture. Both helicopter assisted gathers and bait/water trapping would be employed. The capture methods may be used singly or in conjunction with one another. Regardless of the method, several sites would be needed to gather the wild burros from the HA. Sites would be pre-existing, such as range improvement projects that have existing corrals, or temporary corrals may have to be erected. No corral would be set up in a wilderness area. However, corrals may be set up along cherry stems or boundary roads. Special care would be taken to minimize disturbance to resource values in gather areas. Map 1 shows temporary trap and existing corral sites that may be used.

In addition to the sites pre-selected for temporary traps, up to five additional sites may be utilized as the gather is taking place. The additional temporary sites may need to be selected if: 1) burros are located too far from (more than 5 miles) the pre-selected sites, 2) the helicopter cannot maneuver the burros to the pre-selected sites 3) burros are located in areas not previously known to be inhabited by burros, 4) the terrain is too rugged for burros to safely travel to pre-selected sites, 5) unforeseen hazards to the helicopter and/or ground crew are located at the pre-selected sites, and 6) in the event that the burros safety would be in jeopardy due to illness, injury, age animal, etc. The sites would be located on public land and would be assessed to establish that they present no conflict with other permitted uses and present no safety concerns. The five potential sites would not be used until the authorized Biologist and Archaeologist have surveyed and determined that no impacts to natural and cultural resource values would occur in association with the use of the site. Each site would be selected based upon the location of the animals and how the topography of the area can best benefit helicopter assisted gathers and vehicle access to set up traps.

Trucks pulling horse trailers and gooseneck 5th-wheel livestock trailers would be used to transport panels, saddle horses, and the captured animals. As a result, trapping locations would be limited to those areas where suitable access exists. Temporary trap sites would be located on and adjacent to existing roadways and designated routes of travel. Temporary corrals would be assembled with a series of 10-foot long metal panels. The corrals would be approximately 20-25 feet in diameter with a swing gate. A 10-foot panel would be anchored at each side of the corral gate to create a funnel for easier maneuvering of the animals. The trap and related structures would be installed using hand tools and would be removed upon completion of the gather. At some locations, the capture site would incorporate the access road. Should vehicular traffic require access through the trap or the trap is to be left over night, corral end panels or jute netting would be removed to allow through passage. Temporary corrals would be removed after the completion of the gather in the area. Horse trailers, extra horses, weed-free hay and other equipment would be located adjacent to the corral.

The proposed project would include up to eight people for ground support at each capture site, their horse trailers and associated pickup trucks, a helicopter fuel truck, the capture project manager's truck and an agency representative's truck. The corral panels and feed for the animals would be transported to project sites on horse trailers. A portable loading chute with solid sides would be used when captured animals are loaded onto semi truck livestock trailers.

The wranglers would ensure that the animals are humanely treated during the capture operation, sorting, loading and hauling; work is conducted in a safe manner; observe the guidelines set forth in the capture plan and determine if destruction of any sick or injured animals is necessary during the gather. The captured animals would be monitored on a daily bases at their temporary holding area, receiving water and feed according to their needs. In order to avoid traumatizing the burros, handling of the animals would be kept to a minimum. Burros would be transported to the Ridgecrest corrals where the animals would be treated upon arrival for minor injuries and disease not requiring the immediate care of a veterinarian. If the animal cannot be transported, or if it is uncertain if the animal can be transported to the corral facility without further injury, harm, or undue pain, a contracted veterinarian for the wild horse and burro program would be available upon request. Any severely injured or sick animal would be destroyed in accordance to 43 Code of Federal Regulations 4740.31. This regulation requires that animals are to be destroyed only when a definite act of mercy is needed to alleviate pain and suffering. When it is uncertain as to the severity of an injury or sickness, a veterinarian would make a final determination. Destruction would be accomplished utilizing a humane method. Deposition of euthanized animals would consist of removing the body at least 300 feet from any road and leaving the remains to natural processes.

Captured burros would be counted as they are loaded into the horse trailer. Jennies and foals would be kept as pairs, unless the safety of the foal(s) required them to be transported separately, and when practical, jennies and jacks would be kept separate.

All burros removed would be transported to the Ridgecrest Wild Horse and Burro Holding and Adoption Facility by BLM or contracted personnel. Captured burros are very sensitive to people. Because of this, the number of team members to handle the animals would be limited to essential personnel to alleviate stress on the animals. Handling of the animals would be kept to a minimum in order to avoid traumatizing the animals any more than necessary. The number of animals would be counted as they depart the trailer. After unloading, a determination would be made as to which animals, if any, need special attention for injuries, illnesses or any other problems requiring prompt attention. Any orphans would be separated and provisions made to feed and care for them. The jacks would be separated from the pairs and jennies. At the facility, the burros would be prepared for adoption or sale to the public, their final destination.

Specific Methods for Capture

1. Helicopter-aided captures:

Capture and removal of wild burros would be aided by the use of a helicopter. Typically one helicopter would be utilized at each gather site, unless special circumstances requires two. Only one helicopter would be utilized at each gather site. The helicopter would be used to locate and herd the targeted animals to the capture site and assist wranglers in capturing wild burros. Each area would be flown prior to the start of the round-up to locate the animals, study the terrain and locate any hazards to the burros and helicopter (fences, cliffs, power lines etc.). All aircraft safety, communication procedures and aviation risk assessment provisions outlined in the California Desert District Wild Horse and Burro Aviation Safety Plan would be adhered to when a BLM in house gather is conducted. Private gather contractor helicopter activities are required to follow Federal Aviation Administration (FAA) regulations. The helicopter would normally fly at heights from ground level to 500 feet. It would drop as low as 5 or 6 feet when turning the animals. Refueling would involve one fuel truck, which would be restricted to existing roads. Refueling would occur on flat, previously disturbed areas. Helicopter refueling locations would be located at the capture sites where the refueling truck would be stationed (away from the corral, trailers and vehicles). The helicopter would refuel three to five times each day. Nearby airports may also be used as refueling stations. Two methodologies of helicopter-assisted gathers would be utilized; drive trapping and roping. Each method typically utilizes four to six wranglers. Each wrangler would have one to three horses. Only one horse per wrangler would be used at a time and the horse would be replaced by a fresh horse as the horse the wrangler is using tires. The spare horses would be kept saddled and ready to go, tethered to the stock trailer. The number of animals herded would typically varies from one to twenty head per capture episode. All attempts would be made to keep the herd together as they are being moved. Rate of movement and distance the animals travel would be based on the condition of animals, terrain, physical barriers, and weather. Should any animal become fatigued or over-stressed, the pilot would break off pursuit, so that the animal(s) could rest and recover.

a. Drive Trapping (run traps):

The drive trapping method would use two temporary wing extensions positioned at 45 to 90 degree angles from two sides of the corral. Wing extensions would consist of 6 feet high jute netting supported by steel tee-posts spaced approximately 15 to 20 feet apart for up to 200 yards long. All 200 yards of wing fencing may not be utilized, as the terrain may not require this. The jute provides a visible barrier that aids in herding the animals to the trap corral. Run traps are usually placed in arroyos or immediately over the crest of a hill where the corral extensions are easily disguised or not easily seen. Once a group of animals is herded into the trap corral, the gate is closed and the capture is complete. Occasionally an animal may escape during the gather process or foals and mothers occasionally become separated. These animals would be roped to keep them from escaping or foals from being orphaned.

After the burros are caught they would be herded from the trap corral to the holding pen. These two corrals would be located side-by-side forming the capture site. From the holding pen they would then be loaded into a livestock trailer and transported to either another holding area or transported to the Ridgecrest Wild Horse and Burro Holding Facility. All corrals and wings would be constructed, maintained and operated to handle the animals in a safe and humane manner and be in accordance with the following:

- Traps and holding facilities would be constructed of portable panels, the top of which would not be less than 60 inches tall, and the bottom rail of which would not be more than 18 inches from ground level. All traps and holding facilities would be oval or round in design. The dimensions of the corral would vary with the topography and the dimensions of the road.
- All loading chute sides would be fully covered with plywood (without holes) or like material. The loading chute would also be a minimum of 6 feet high.
- All runways to the loading chute would be a minimum of 30 feet long and 5 feet high, and would be covered with plywood, burlap, and plastic snow fence or like material a minimum of one to five feet above ground level.
- Wings would not be constructed out of barbed wire or other materials injurious to animals. Wings may be constructed along existing fence lines, at the discretion of the project inspector (if contracted), only if the barbed wire or other wire fencing material is removed from the fence posts and laid on the ground distal to the posts for the length of the wing, or if portable panels are placed along the inside of the fence to protect the animals from injury from the fence wire.

b. Roping:

The helicopter-roping method would use the helicopter to herd the wild burros to the wranglers on horseback. The wranglers would be positioned out of view from the herded burros, but in such a position that they can maneuver their horses when pursuing the burros. The helicopter would take the main herd to a holding area and would break off a smaller set of animals that the wranglers can manage, usually one less than the number of wranglers, so that if there is a miss, there is a back up roper. These animals would then be herded to the capture area. The wranglers would pursue,

rope by lassoing the animal around the neck, and then lead the captured animal into the corral. The burro would be led into the holding corral and the rope would be removed from its neck. After a burro is caught it would be herded from the corral into the wing leading into the stock trailer. The animal is then coerced into the trailer. This would be repeated until all the targeted animals are captured. The burros would then be transported as previously described.

2. Bait / Water Trapping:

a. Bait Trapping

The trap site would be located on active trails where suitable vehicle access exists. Trap sites would be located on previously disturbed ground. Weed-free hay would be placed on the trails for the burros to become familiar with that food source. Portable panels would be placed around the area where the burros come to feed on the hay. The trapping area would be approximately 40 feet by 40 feet. A trigger gate would be left open until burros are not afraid of coming into the trap. Once the trigger gate is set, the traps would be checked daily for any trapped animals. Trapped burros would be moved to a designated holding area. In the case that other animals are trapped besides burros, the burros would be sorted. If it is not possible to sort without harming the animals, the trigger gate would be opened allowing the animals to escape. When the traps are not in service, the trap gates would be locked open. Trapping operations would extend from a few weeks to several months.

b. Water Trapping

The BLM and the lessee of the Clark Mountain Allotment would work together to water/bait trap burros in order to remove excess burros from the Clark Mountains HA. Water trapping would involve: 1.) excluding burros at waters where no trap is set, and 2.) setting a one way gate (trigger) at watering site(s). Bait trapping is similar except hay is placed in the trap as bait.

It would involve the use of existing corrals and when needed temporary corrals or devises to trap or limit animal access to water.

The allotment lessee would work under a current cooperative agreement for burro removal and would only trap burros within the respective allotment.

The other existing water sources may be closed off to burros. This may include turning off the water to troughs, closing corrals, temporarily placing portable panels, or steel fence posts and wire around water sites (a temporary fence). This temporary fence would have one to three strands of wire running between them with flags attached to the wire. The flags flapping in the breeze repel burros from the watering area. The temporary fence would be as small as practical. Water sites that are fenced off are generally difficult to access with livestock trailers or are located where setting up traps would result in new disturbance. The temporary barriers at water sources of prime

importance to deer would be at least 60 foot long on a side and not over 60 inches tall at any point with opposite sections 42 inches or less in height for escape. Those barriers around bighorn sheep water sources would include several bighorn sheep panels to allow sheep access to the water, while excluding burros. The disturbance would be temporary in nature and consist of steel fence post holes. The related structures would be installed by hand using hand tools and would be removed upon completion of the gather in the area.

Traps:

The corrals used to trap burros would contain adequate water and fencing. There would be no exposed barbed wire in any of the corral facilities. Any objects potentially injurious to the animals would be removed or made safe. Water troughs would be located inside each corral. The corrals that would be used to trap burros would be temporarily modified using portable steel pipe panels (5 feet high) that are self supporting to divide the corral into a trapping area and a holding area. The dimensions of the trap and holding areas would vary with the dimensions of the corral. Both areas would be designed so that animals have access to water. This area would be constructed entirely within existing disturbance. The trapping area consists of placing a finger trigger gate at the entrance way of the corral. This would allow the animals to enter to drink, but not exit. The size of the trap area would be approximately 400 square feet, but would vary with the size of corral. A swing gate would be placed between the holding area and the trap area so that trapped burros can be moved into the holding pen. Burros would be loaded and transported within 48 hours of being captured. If the holding facility becomes too crowded, the trigger gate would be locked open, until extra panels are set up to expand the holding facility or until the animals are removed. If the burros are to be transported by truck and trailer by the lessee to a holding corral, the lessee would notify the BLM prior to such action. The holding corral must meet the same standards of the capture corral. The Permittees would feed good quality grass hay, supplied by the BLM, to the captured burros.

All capture related structures would be installed by hand using hand tools and would be removed upon completion of the gather in the area. A new site may then be set up according to the location of other herds. When the traps are not in service, the trap gates would be locked open.

Protection Measures:

Health and Safety (All)

1. Capture Plan activities would be supported by the Needles Field Office Field Projects Health and Safety Plan incorporated by reference, addressing emergency recognition and prevention; communications; emergency contacts; biological hazards; physical hazards; unforeseen hazards evacuation routes and resources; and, standard operating procedures, engineering controls, and work practices. Releases of any material not authorized would be reported immediately to the Federal Interagency

Communications Center (FICC) at (909) 383-5652. An Initial Report would be faxed to the authorized officer within 24 hours of the incident's discovery (760) 326-7099. Incidents that occur during non-office hours must be faxed to the FICC concurrently at (909) 383-5587. The Authorized Officer will receive a comprehensive follow-up report within 14 calendar days of the incident's discovery.

2. The helicopter pilot would be instructed to avoid steep craggy areas of the surrounding mountains so as to protect lambing bighorn sheep. The pilot would also be instructed to break off pursuit if bighorn sheep inadvertently start herding with the burros.

Wilderness:

1. Capture sites would be located in areas that have been previously disturbed. No temporary trap sites, temporary corrals, helicopter landings or ground motorized vehicle travel would occur within any wilderness area. The capture sites would be located along wilderness boundaries and would be confined within the boundary roads themselves, cherry stem roads, or areas otherwise excluded from wilderness. The helicopter pilot would be advised of the location of wilderness boundaries and be provided with a wilderness area boundary map. The pilot would also be instructed to minimize helicopter use over wilderness. Special care would be taken to minimize disturbance to resource values in the gather area.

Desert Tortoise Conservation Measures

Activities associated with the proposed action would comply with the following terms and conditions from the Biological Opinion for the California Desert Conservation Area Plan [Desert Tortoise] (1-8-04-F-43R).

1. Term and Condition 1
 - a. The Bureau must ensure that only biologists authorized by the Service under the auspices of this biological opinion are allowed to handle desert tortoise to assist in implementing the actions for which take was exempted in this incidental take statement.
 - b. All handling of desert tortoises and their eggs, relocation of desert tortoises, and excavation of burrows must be conducted by an authorized biologist in accordance with recommended protocol (Desert Tortoise Council 1999).
 - c. The Bureau must ensure that only biologists approved or authorized by the Service under the auspices of this biological opinion conduct pre-project clearance surveys for desert tortoises or engage in moving desert tortoises out of harm's way.
 - d. The Bureau must submit the names(s) and credentials of the proposed biologists(s) to the Service for review and approval at least 15 days

prior to the onset of activities. The Bureau must ensure that no activities begin until a biologist is approved by the Service.

2. Term and Condition 2

When burros are being removed from areas where desert tortoises are likely to be present and are likely to be killed or injured by the removal of burros, the Bureau must have biologists authorized by the Service present to ensure desert tortoises are moved from harm's way or avoided, if necessary. The Bureau must use its best professional judgment in determining when a Service-authorized biologist needs to be present; we expect such circumstances to occur when the removal of burros is likely to result in concentrated activity by horses, burros, or workers or ground disturbance in areas where desert tortoise are likely to be present and are likely to be present and are likely to be killed or injured by the removal activities.

3. Term and Condition 5.a.

- a. To ensure that the measures proposed by the Bureau are effective and are being properly implemented, the Bureau must contact the Service immediately if a desert tortoise is killed or injured by human activities. At that time, the Service and the Bureau must review the circumstances surrounding the incident to determine whether additional protective measures are required. Grazing, the removal of burros, and casual use associated with recreation and mining may continue pending the outcome of the review, provided that the Bureau's proposed protective measures and any appropriate terms and conditions of this biological opinion have been, and continue to be fully implemented.

Additional measures that would be adhered to include:

4. The authorized biologist would maintain a record of all desert tortoises handled. This information shall include for each tortoise:
 - a. the locations (narrative and maps) and dates of observations;
 - b. general condition and health, including injuries and state of healing and whether animals voided their bladders;
 - c. location moved from and location moved to;
 - d. diagnostic markings (i.e., identification numbers or marked lateral scutes);
 - e. slide photograph of each handled desert tortoise as described in previous measure.
5. A BLM biologist would conduct a desert tortoise survey in accordance with U.S. Fish and Wildlife Service protocol (USFWS) at each proposed capture site.

6. Temporary structures, vehicles, equipment, helicopter landing sites and other activity would be located in areas free of tortoise burrows. At least 24 hours prior to initiation of activities, the area around the holding pens/helipad/campsite would be surveyed for tortoise. All burrows would be marked and temporary fencing would be erected around all burrows.
7. The authorized biologist would be responsible for overseeing compliance with protective stipulations for the desert tortoise and for compliance coordination. This individual would have the authority to halt all activities that are in violation of the stipulations.
8. The gather crew would participate in a desert tortoise education program:
 - a. general behavior and ecology of the tortoise;
 - b. sensitivity to human activities;
 - c. legal protection;
 - d. penalties for violations of State or Federal laws;
 - e. reporting requirements; and
 - f. project specific mitigation measures.
9. The area of disturbance would be confined to the smallest practical area, considering topography, placement of facilities, locations of burrows, public health and safety, and other limiting factors. To the extent possible, previously disturbed areas within the site would be utilized. The project lead would ensure compliance with this measure.
10. Upon locating a dead or injured tortoise, the project proponent or agent is to notify the BLM Resource Area Office. The BLM must then notify the Ventura field office of the USFWS by telephone within three days of the finding. Written notification must be made within five days of the finding, both to the appropriate USFWS field office and to the USFWS Division of Law Enforcement in Torrance. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death, if known, and other pertinent information.

An injured animal shall be transported to a qualified veterinarian for treatment at the expense of the project proponent. If an injured animal recovers, the appropriate field office of USFWS should be contacted for final disposition of the animal.

The BLM shall endeavor to place the remains of intact tortoise carcasses with educational or research institutions holding the appropriate State and Federal permits per their instructions. If such institutions are not available or the animal's remains are in poor conditions, the information noted above shall be obtained and the carcass left in place. If left in place and sufficient pieces are available, the BLM (or its agent) shall attempt to mark the

carcass to ensure that it is not reported again. Arrangements for disposition to a museum shall be made prior to removal of the carcass from the field.

11. Except on county-maintained roads, vehicle speeds shall not exceed 20 miles per hour through desert tortoise habitat.
12. Workers shall inspect for tortoises under a vehicle prior to moving it. If a tortoise is present, the worker shall carefully move the vehicle only when necessary and when the tortoise would not be injured by moving the vehicle or shall wait for the tortoise to move out from under the vehicle.
13. No dogs shall be allowed at a work site in desert tortoise habitat.
14. All trash and food items shall be promptly contained within closed, raven-proof containers. These shall be regularly removed from the project site to reduce the attractiveness of the area to ravens and other tortoise predators.
15. The probability of a desert tortoise wandering onto the removal site is remote. However if such an instance should occur all activity would cease until such tortoise is no longer in danger.
16. A number of rope traps are located in close proximity to the Kern River Pipeline right-of-way. The right-of-way was heavily disturbed by the pipeline expansion project completed in May of 2003. The disturbed area was restored following guidelines, monitoring, and success criteria included in the Reclamation Plan for the right-of-way expansion project. To the extent possible, activities associated with the burro gather would not encroach upon the Kern River Pipeline right-of-way. This includes exclusion of vehicles and trap sites from the right-of-way. Vehicles could cross the right-of-way using open routes of travel.

Wildlife

1. Big horn sheep lambing areas will be avoided during January 1 through June 30.

Hazardous and Solid Wastes

1. The burro capture would be planned so as not to result in the release of solid, hazardous, or special wastes. Releases of any hazardous or special waste (petroleum, etc.) material would be reported immediately in accordance with the Hazardous Materials Emergency Response Contingency Plan (24 hours a day, 7 days a week) to the Federal Interagency Communications Center (FICC) at (909) 383-5651. An Initial Report would be faxed to the authorized officer within 24 hours of the incident's discovery (760) 326-7099. Incident reports that are due over a weekend and/or holiday period must also be faxed to the FICC concurrently

at (909) 383-5587. The authorized officer would receive a comprehensive follow-up report within 7 calendar days of the incident's discovery. All Environmental Protection Agency, Office of Safety and Health Administration and California Office of Safety and Health Administration regulations, and Bureau Policy will be complied with. Material Safety Data Sheets for all chemicals used on site will be available on site, and will be reviewed by users prior to use. All decontamination equipment and supplies will be provided according to MSDS and product label instructions. The Spill Prevention, Control and Countermeasures Plan for remote fueling for helicopter project work for the tracking, capture and removal of wild horses and burros would also be followed (Appendix B).

Health and Safety (BLM Employees)

1. In addition to the health and safety provisions addressed in protection measure 1, BLM employees would comply with agency health and safety policy. The proposed action includes by reference the Job Hazard Analyses (JHA's) of applicable staff positions, Risk Assessments for specific Tasks planned (e.g. helicopter use), Health and Safety Plan, and Hazardous Materials Emergency Response Contingency Plan (in Appendix B). The Bureau Safety Manual (1703-1-2) is also incorporated by reference and special attention will be paid to sections concerning Wild Horse and Burros and Helicopter Operations. Tailgate Safety Sessions would be held before work each day. All employees would read all of the above listed safety documents.

Special attention would be given to avoid over working/heating horses and employees, and to assurance that potable water is available on site, and both horses and employees are fully hydrated at all times. Wrangler horses have died in prior operations and special efforts would be made to avoid such accidents or fatalities.

All accidents during the operation would be reported per Bureau policy and copies of all accident reports would be faxed to the Authorized Officer within 72 hours of the accident, by the responsible supervisor. First aid and cardiopulmonary resuscitation training would be given to all employees and at least one employee in every crew, on every shift would be certified beyond a basic first aid level. Helicopter operations are inherently dangerous, and special attention would be given to compliance with all regulations and policies. Persons working in and around helicopters would be trained within two years in helicopter operations and certified by the Bureau.

15.2 Alternatives Considered but not Analyzed in Detail:

- 1) Non Helicopter-Assisted Wild Burro Gather and Removals in Wilderness and Non-Wilderness Lands

An alternative excluding the use of helicopters in conducting the burro removal was considered but eliminated from detailed analysis. This alternative would be undertaken utilizing wranglers and horses only. Helicopter use in the removal process enables locating burros over an extensive area during a relatively short period of time and offers superior visual observation of burros occupying the project area. In order to accomplish the burro removal without the use of a helicopter would necessitate increasing the number of wranglers and riding horses to cover a comparable area and require increasing the number of riding horses to replace worked horses as they tire. Wranglers on horseback would not be able to locate and move burros in particularly rugged terrain nor in locations at great distances from base camps. Further, surface disturbance would be increased due to the activities of a greater number of wranglers on horseback over a protracted period of time.

2) Wild Burro Removal through Euthanasia:

An alternative consisting of the removal of burros by means of euthanasia was considered but eliminated from detailed analysis. The Interior Appropriations Bill precludes BLM from funding destruction of any healthy wild horse or burro. It is BLM policy to remove and place all excess animals under the BLM's National Adopt-a Horse or Burro program as amended by Public Law 108-447 or be placed on sanctuaries. If at such time the Interior Appropriations Bill provides funding for this type of activity, this environmental assessment would be re-evaluated

15.3 No Action Alternative

The proposed Action would not be undertaken as proposed. Existing management and use of the site would continue subject to applicable statutes, regulations, policy and land use plans.

16. ENVIRONMENTAL CONSEQUENCES:

The following elements of the human environment, subject to review specified in statute, regulation or executive order, are not located within the project area: Floodplains, Prime or Unique Farm Lands, Wetlands and Riparian Zones, Wild and Scenic Rivers. Essential Fish Habitat, Social and Economic, and Wetlands/Riparian Zones

16.1 Proposed Action

Air Quality

The Mohave Desert Air Quality Management District (MDAQMD) has state air quality jurisdiction over the project area. The MDAQMD has rules that apply to this project along with permitting requirements. Much of the time, air quality throughout the project area is generally good. There are, however, times that the area does not meet air quality standards due to locally generated and/or wind transported pollutants. The

vicinity in which the proposed expansion is located is currently classified as a federal non-attainment area for ozone and PM-10 under national standards. The proposed project area is within the Mojave Desert PM-10 Planning Area and the South East Desert Ozone non-attainment area. The State Implementation Plan (SIP) identifies sources of PM-10 emissions and control measures to reduce emissions. The SIP emphasizes controls and management. As a minimum, the Environmental Protection Act (EPA) requires the application of reasonable available control technology (RACT) to stationary emission sources and reasonable available control measures (RACM) to mobile sources and new source review and permitting.

Fugitive dust would occur due to the soil disturbance as a result of the trampling action of the burros when soil moisture levels are low. Support vehicle use on the access roads would generate small amounts of PM10 emissions and could carry soils onto the paved roads, which would increase entrainment emissions. PM10 emissions as a result of the proposed activities are estimated to be below the 100-ton level in either of the non-attainment areas. The operation of internal combustion engines in the vehicles and helicopter would generate unknown low levels of particulate and ozone precursor emissions. Ozone precursor emissions are expected to be minimal. No appreciable offsite impacts are anticipated. Control measures are included to reduce fugitive dust emissions from the proposed project. The proposed project will not exceed the de minimus emission levels and is addressed in the SIPs. As a result no further conformity analysis or determination is necessary.

Cultural Resources and Native American Religious Concerns

The proposed removal of the burro population from the Clark Mountain Herd Area represents an action that will protect the archaeological values present within the Clark Mountain Area of Critical Environmental Concern (ACEC) and adjacent lands. There are numerous archaeological sites found throughout the Clark Mountain Herd Area. Both the Halloran Springs ACEC and the Dinosaur Track ways ACEC are located within the boundaries of the Herd Area. Many sites are located near spring locations, which attract burros. Trampling, disturbing the desert pavement by wallowing in the dust, establishing new trails and using existing prehistoric trails all damage and obscure existing archaeological sites.

In July 1995, Dennis Daraghy, a qualified Needles Field Office, District Archaeological Technician (DAT), conducted an archaeological survey of nineteen designated trap and corral locations identified for use for burro removal activities addressed in the Fiscal Years 2006 through 2011 Environmental Assessment. The results of the archaeological survey of the nineteen burro trap and corral locations were negative. In March and April 2006, the Needles Field Office Archaeologist, Wildlife Biologist, and Range Conservation specialists conducted a survey of the nineteen burro trap and corral locations previously surveyed in 1995. The results of the March and April 2006 were the same as the 1995 archaeological survey. No previously recorded, or unrecorded

archaeological resources were identified within the nineteen burro trap and corral locations.

In October 2006, the Needles Field Office Archaeologist, Wildlife Biologist, Range Conservationist, and Botany Intern, conducted a pedestrian survey of sixteen additional sites within the Clark Mountain HA. As a consequence of the pedestrian survey, four archaeological sites were identified within the project area. Two sparse lithic scatter sites (e.g., lithic debitage, hammer stones and ground stone fragments) were identified on a shoreline playa, and two additional sites (e.g., a petroglyph site comprised of five elements, and a boulder with cupules ground on the flat surface of the boulder) were identified in the foothills of the Clark Mountain Herd Area. The location of the four rope and trap sites were moved well away from the location of the identified archaeological sites. By modification of the project design, the newly identified cultural resources will not be impacted as a consequence of the proposed action. The four sites have been recorded on appropriate State of California Preservation Office forms, and the data forwarded to the Archaeological Information Center, San Bernardino County Museum, Redlands, California. No impacts to cultural resources are anticipated as a consequence of the proposed action.

Native American tribes have utilized the natural resources of the Clark Mountain region of the Mojave Desert for an extensive period of time, from the prehistoric period through the modern era. The purpose of the project is to prevent and enhance sensitive archaeological resources throughout the Clark Mountain region. A review of the Native American Sacred Lands Inventory revealed that no sacred sites are located within the proposed project sites. Native American religious values would not be affected as a consequence of the proposed project.

Ecologically Critical Area

The Desert Wildlife Management Areas are discussed in the Wildlife section. The Mesquite Lake ACEC will not be impacted as there are very few burros in that area, and the corral sites that will be used are not located within the ACEC boundary. The Clark Mountain, Halloran Spring, and Dinosaur Trackway ACECs are discussed in the Cultural Resources section.

Environmental Justice

No minority communities or low income communities are located within or adjacent to the proposed project areas. The proposed action would not impact distinct Native American cultural practices or result in disproportionately high or adverse human health or environmental effects on minority communities.

Hazardous and Solid Waste

The protection measures in the proposed action sufficiently addressed the precautions that would limit the potential for release of solid, hazardous, or special wastes. The

protection measures also outline the procedures to tack in case of release of solid, hazardous, or special wastes.

Health and Safety

The proposed action, including the Risk Assessments, and Health and Safety Plan sufficiently address health and safety concerns for BLM in house gathers. See the Health and Safety Plan (Appendix B), Job Hazard Analyses and the Risk Assessments for specific Tasks planned (e.g. helicopter use). The Bureau Safety Manual (1703-1-2) is incorporated by reference and special attention will be paid to sections concerning wild horse and burros and helicopter operations safety. All employees will read and follow all of the above listed safety documents. Tailgate safety sessions will be held before work each day. Special attention will be given to avoid over working/heating horses and employees, and to assurance that potable water is available on site, and both horses and employees are fully hydrated at all times.

Recreation

There are a wide variety of recreational uses that occur within the project area, including hiking, rock hounding, hunting, off-road vehicle activities, camping, horseback riding, geocaching, wildlife and bird watching, nature study, sight seeing, landsailing and kite buggy activities. Visitors are attracted to the dry lake beds, primitive camp sites, and scenic views.

Most non-motorized recreation use is by individual, group, or commercial permittees engaging in activities on Ivanpah Dry Lake. The off highway vehicle use occurs on the roads around and cherry stems through the Mesquite and Stateline Wildernesses and the open routes around Ivanpah Dry Lake.

Removal of the burro population from the Clark Mountain Herd Area would benefit the recreational experience by eliminating dung piles on the dry lake beds, decrease new trail creation and dirt wallows that increase dust particles. Dry lake beds, free of burro dung would enhance wind dependent activities on Ivanpah Dry Lake. The reduction in the burro population will decrease interaction impacts between OHVs, humans, and burros.

Conforming to the land management goals outlined in the CDCA Plan (1980) as amended by the 2002 NEMO plan amendment may be perceived as a conflict of use by wildlife and nature enthusiasts who visit the area to observe and photograph burros.

Some recreational use may be displaced during capture activities, but the extended time line, use of multiple capture techniques, and dispersed recreational use would limit the impacts anticipated to be minimal.

Soils

Long term impacts to soils are not anticipated as a result of the proposed action. In time soil conditions are expected to improve in those areas where burros congregate, such as around surface water sources, because of reduced numbers of animals.

Surface and Ground Water Quality

Surface Water

Surface water will benefit from the burro removal project. Large, uncontrolled concentrations of wild burros at water sources damage riparian vegetation, compact the soil around the water source, and increase soil erosion which contributes to increased water turbidity. During periods of drought and/or the hottest part of the year, wild burros concentrate around these water sources and fecal matter tends to accumulate, which affects water quality through fecal matter coliform contamination. Water turbidity, water depletions, changes in water chemistry due to urine and feces, changes in temperature and repeated disturbances of the water surface, subsurface and the surrounding area influence the survival of aquatic species or terrestrial species dependent on these water sources. No impacts to surface water resources will result from the proposed removal.

The potential for over-population induced shortages of water would be reduced in the uplands. Soils and vegetation associated with water sources, will receive less trampling related impacts. The quality of the water resource would improve with less turbidity from ground disturbances and from urine and fecal contamination.

Groundwater

Impacts to groundwater are not anticipated.

Vegetation

The Clark Mountain HA (233,410 acres), located in the northeastern San Bernardino County, is under the jurisdiction of the BLM, Needles Field Office. The Clark Mountain HA is characterized by broad sloping desert plains with rough, sharply eroded desert mountain ranges and abrupt ridge lines leading into various drainages. The elevation ranges from 800 feet in Ivanpah Valley and Mesquite Valley to 7,270 feet just below Clark Mountain Peak.

Shrub and tree species present in the HA include creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), ratany (*Krameria spp.*), ephedras (*Ephedra spp.*), cheesebush (*Hymenoclea salsola*), saltbushes (*Atriplex spp.*), honey mesquite (*Prosopis glandulosa*), paperbag bush (*Salazaria mexicana*), catclaw acacia (*Acacia greggii*), brittlebush (*Encelia spp.*), inkweed (*Suaeda spp.*), and box-thorn (*Lycium spp.*). Predominant succulent species in the Herd Management Area include chollas and prickly-pears (*Opuntia spp.*), yucca (*Yucca spp.*), cottontop cactus (*Echinocactus*

polycephalus), fish-hook cactus (*Mammillaria* sp.), Engelman hedgehog cactus (*Echinocereus engelmannii*), and California barrel cactus (*Ferocactus cylindraceus*). Annual and perennial herbaceous species and grasses include species such as: big galleta (*Hilaria rigida*), galleta grass (*Hilaria jamesii*), buckwheats (*Eriogonum* spp.), plantain (*Plantago* spp.), wire-lettuce (*Stephanomeria* spp.), locoweed (*Astragalus* spp.), and spineflowers (*Chorizanthe* spp.).

Uplands are comprised of creosote/burro brush (*Larrea divaricata*/*Ambrosia dumosa*) with the upper elevations containing riparian woodlands of honey mesquite (*Prosopis juliflora*), screw bean mesquite (*Prosopis pubescens*), Gooding willow (*Salix goodingii*), and Fremont cottonwood (*Populus fremontii*). The dominant perennial vegetation includes the following species: black Gramma (*Bouteloua eripoda*), galleta grass (*Hilaria jamesii*), sand dropseed (*Sporobolus cryptandrus*), bush muhly (*Muhlenbergia poterii*), squirrel tail (*Sitanion hystrix*), Indian ricegrass (*Oryzopsis hymenoides*), blue gramma (*Hilaria rigida*), filaree (*Erodium* spp.), schismus (*Schismus barbatus*), red brome (*Bromus rubens*), Mormon tea (*Ephedra nevadensis*), range ratany (*Krameria grayii*), spiny menodora (*Menodora spinosis*), and winterfat (*Eurotia lanata*).

In the past, burros have had a negative impact on vegetation. Under the proposed action, removal of the burros will prevent continued damage to the vegetative resources. Specific objectives for vegetation will be closer to attainment through the complete removal of burros.

There will be a short term negative impact to the vegetation within the trap sites and holding corrals, which would be approximately one acre each. The vegetation would be moderately to severely trampled by the burros that would be concentrated at those locations. This will be a minor impact, however, since the impacted areas would be small in relation to the size of the gather area. Natural vegetative regeneration could be expected within two to three years depending on the climatic conditions.

Invasive/ Non-native Species

Seeds of invasive/nonnative species may be introduced by horses during gather activities. Vehicles may also inadvertently transport seeds. Soil disturbance due to concentration of the animals may also produce conditions that allow invasive exotics to become established. Invasive/nonnative species impact native plant communities by reducing natural biodiversity and vegetation production, and lead to soil erosion. Several invasive species, such as schismus and brome, are already established in the project areas. The chance of this plant or other invasive/nonnative species becoming more widespread because of the project is low, as horses would be fed weed free hay prior to, and during the gather, and exotic plant concentrations, although they are high along the sides of the trails, are trampled within the burro trails.

Implementation of the proposed project would help decrease the spread of exotic plants, as burros would be less likely to graze on exotic grasses and forbs and spread them to other areas.

Special Status Plants

Special status plant species consist of plants listed as rare, threatened or endangered by the state or federal government, as well as non-listed species that are candidates for federal listing or that are included in the California Native Plant Society (CNPS) inventory of rare plants. No listed plant species are known or expected to occur in the proposed project area.

Unusual Plant Assemblages (UPA)

Temporary trap site 16 is located slightly within the Shadescall UPA. There would be a slight potential of some damage to shadescall plants in the UPA. The impact would be limited to a small area of the UPA.

Wild, Free-Roaming Horses and Burros

Burros removed by helicopter assisted gathers may experience some physical strain due to the distance animals travel, age and condition of animals, terrain, physical barriers, weather, the possibility of tripping and falling when roped, and the process of being led into the holding pen. Burros can experience some trauma from trying to escape from the trap or holding corral and being loaded onto the trailers to be transported to the holding facility. For injuries and disease not requiring the immediate care of a veterinarian, the animal would be transported to the Ridgecrest corrals where the animal would be treated upon arrival. If the animal cannot be transported, or if it is uncertain if the animal can not be transported to the corral facility without further injury, harm or undue pain, a contracted veterinarian for the wild horse and burro program would be available upon request. Any severely injured or sick animal would be destroyed in accordance to 43 Code of Federal Regulations (CFR) 4740.31. This regulation states that animals would be destroyed only when a definite act of mercy is needed to alleviate pain and suffering. When it is unsure as to the severity of an injury or sickness, a veterinarian would make a final determination. Destruction would be done in the most humane method available. Deposition of the bodies would be moved at least 300 feet from any road and left for natural processes to take place. The potential of injury is small once burros are captured, they typically calm down quite easily. Once burros are captured, they typically calm down quite easily. It is rare that burros are injured or die during captures but there is a slight potential for serious injury or death to a burro being captured. With the utilization of professional wranglers it is anticipated that there would be a reduced risk of injury or death to burros during their capture, loading, unloading and transportation.

The removed burros would be placed into the BLM's National Wild Horse and Burro Adoption Program as amended by Public Law 108-447. Burros would be transported to

the BLM's Ridgecrest Wild Horse and Burro Holding and Adoption Facility. They are then vaccinated, wormed, freeze branded, tested for Equine Infectious Anemia and given any medical treatment needed prior to being placed which typically takes four to six weeks. Burros removed from their natural environment adjust well to domestication. Burros are adopted or sold for use as pack animals, riding, pulling carts or wagons, guard animals for livestock, and as pets.

Wilderness

Naturalness:

The proposed action would impact the naturalness of wilderness areas (WAs). The herding and wrangler activities would cause disturbance to vegetation and soil. The sight and sound of the helicopter would impact naturalness during the over flight activities. The helicopter-assisted herding would require flying over the wilderness areas at altitudes as low as 5-6 feet when turning burros. Using helicopters at this low level creates physical impacts to the naturalness of the immediate area. Impacts include the blowing of soils, injury to plants, and stress and possible injury to wildlife.

The removal of excess burros from the wilderness areas within WAs would benefit the naturalness by eliminating environmental degradation from uncontrolled populations of wild burros and by minimizing trailing, formation of dirt wallows, excessive browsing of vegetation, and excessive accumulation of fecal matter by the burros. The removal of non-native species increases the ability of native species to compete for limited resources and allows natural processes to operate freely within the wilderness.

Opportunities for Solitude and Primitive Recreation:

The sight and sound of the helicopter would impact the opportunities for solitude and primitive recreation during over flight activities. The presence of the wranglers within wilderness would also affect the opportunity for solitude. The capture sites that are located adjacent to wilderness boundaries including the crew, vehicles, the landing of the helicopter, and temporary facilities may be seen and heard from some areas within wilderness. Section 103(d) of the CDPA states, "The fact that non-wilderness activities or uses can be seen or heard from areas within a wilderness shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area." Removal activities and the impacts to the opportunities for solitude and primitive recreation would occur for a period of a few days per site. Removal activities and associated impacts may occur in subsequent years until burro management levels are reached.

Wilderness Act, Section 4(c) Conformance:

No temporary corrals, helicopter landings, motorized equipment, vehicle use, nor mechanical transport would occur within any federally designated wilderness area.

Of the alternatives considered the proposed action is the least minimum tool necessary for the successful accomplishment of burro removal.

Wildlife

Threatened and Endangered Species

The range of the desert tortoise (*Gopherus agassizii*) includes the Mojave and Sonoran deserts in California, Nevada, Arizona, Utah, and Sinaloa, Mexico. The Mojave population of the desert tortoise was listed as threatened by the U.S. Fish and Wildlife Service on April 2, 1990 (55 FR 12178) and as threatened by the State of California in 1989. Critical habitat for the desert tortoise was designated by the U. S. Fish and Wildlife Service in portions of California, Nevada, Arizona, and Utah on February 8, 1994 (59 FR 5820). Population losses due to disease, human-caused impacts, and the cumulative effects of habitat loss, degradation, and fragmentation from construction, urbanization, and development have resulted in the range wide decline in desert tortoise populations. Desert tortoise habitat is typically found in bajadas with suitable substrate for burrowing and creosote scrub plant communities at elevations of 1,280 meters and below. The NEMO plan amendment included the establishment of Desert Wildlife Management Areas (DWMA) as recommended by the Desert Tortoise Recovery Plan (U.S. Fish and Wildlife Service 1994). The Recovery Plan also established Recovery Units, which correspond generally to genetically distinct population segments. The Clark Mountain Herd Area is in the Eastern Mojave Recovery Unit. This recovery unit contains two separate critical habitat units (Piute-El Dorado and Ivanpah) and three separate DWMA's (Shadow Valley, Piute-Fenner, and Ivanpah).

Thirty-eight percent of the Clark Mountain Herd Area is within the Ivanpah Critical Habitat Unit and the Shadow Valley DWMA. Data on desert tortoise on a permanent study plot in the Shadow Valley DWMA were collected in 1988, and 1992; the densities of desert tortoises of all sizes per square mile were 50, and 58, respectively (Berry 1996). Desert tortoises occur in the California desert from below sea level to an elevation of 7,300 feet, but the most favorable habitat occurs at elevations of approximately 1,000 to 3,000 feet (Schamberger and Turner 1986). The active season for desert tortoises occurs in the spring and early summer when annual plants are available for forage. In the eastern Mojave recovery unit, desert tortoise are also active in late summer and early autumn in addition to spring because this region receives both winter and summer rains and supports two distinct annual floras on which they can feed (U.S. Fish and Wildlife Service 1994).

Surveys of the proposed capture locations were conducted in March, April and October of 2006 following the USFWS *Field Survey Protocol for any Federal Action that May Occur within the Range of the Desert Tortoise* (1992). Tortoise sign (burrows and scat) were observed within the zone-of-influence at two sites located within the Shadow

Valley DWMA. A number of tortoises and sign have been observed within this area during surveys for other projects (e.g. Valley Wells Fire) and while traveling along Excelsior Mine Road and Kingston Road (e.g. Mesquite 3 Fire). No sign was observed at capture locations outside of the DWMA. However, tortoise sign has been observed in the area adjacent to Ivanpah Dry Lake by biologists conducting surveys for the Caltrans/ California Department of Food and Agriculture Joint Port of Entry Station project. Due to the high elevation, it is unlikely that desert tortoise would occur within trap sites located at Mountain Pass. Habitat for desert tortoise is present in the area around Mesquite Lake, however, no sign was observed during surveys for this project. Adherence to the protection measures, including having an authorized biologist on site during the burro gather would result in the proposed action having “no effect” on the desert tortoise.

Sixteen of the 35 capture sites are located within critical habitat and the Shadow Mountain DWMA. Three of those 16 sites use existing corrals where past disturbance by cattle is still very evident. Seven sites outside of the DWMA use existing corrals. The capture sites would be located primarily along open routes, and at existing range improvements to facilitate capture and to reduce the amount of new surface disturbance. In addition, disturbance to the restoration work along the Kern River Pipeline right-of-way would be minimized by keeping activities related to the project out of the right-of-way to the extent possible.

The elimination of burros within the Clark Mountain HA would have a positive impact on desert tortoises and their critical habitat. A summary of these impacts has been provided in the NEMO plan amendment (page 4-44) and includes reduction in the loss of vegetation cover, litter, and soil compaction. These impacts were analyzed in the biological opinion for the California Desert Conservation Area Plan as amended (1-8-04-F-43R). It is possible that individual desert tortoise could be harmed or killed during the round-up activities. Adherence to term and condition 2 of the biological opinion will reduce take of desert tortoise during removal of burros. In addition, substantially removing burros from this HA will reduce impacts from future round-ups. As summarized by the biological opinion “removal of burros from this area constitutes an important action to promote the survival and recovery of the desert tortoise.” The biological opinion noted that neither burros nor desert tortoise are distributed uniformly across the landscape. Therefore, the impacts to the primary constituent elements of their critical habitat would also be variable across the landscape. The biological opinion summarized these impacts by stating that “Overall, the removal of burros from this area is highly likely to improve, to a substantial degree, the condition of several primary constituent elements of critical habitat in the Ivanpah Critical Habitat Unit (biological opinion, pages 144-145).”

No other candidate, threatened, or endangered species are anticipated to be affected by this action.

General Wildlife

Short-term impacts associated with the proposed action would include temporary disturbance of wildlife behavioral patterns. Some injury or mortality may occur to small fauna such as lizards and pocket mice that would hide in the immediate surrounding cover for protection instead of fleeing the area entirely. Helicopters have been observed to produce negative impacts on wildlife species, including running and panic behavior in big game species, flight response in passerines, and escape behavior in eagles and other raptors. Although the precise overall impacts of low-flying aircraft on wildlife are not known, caution would be exercised in using helicopters in wildlife concentration and lambing areas to minimize the impacts. There would be little direct impact to bighorn sheep from the use of helicopters. Helicopters would generally be working the burros down washes and over flatlands. Generally, bighorns reside in the higher, more rugged terrain. Mule deer also reside within the area of the proposed project. These animals would be affected in the same manner as the bighorn sheep by the actions of the proposed project.

Desert bighorn sheep are a BLM sensitive species. There is a potential for deer or bighorn sheep to be trapped when bait-trapping techniques are used. Any wildlife that becomes trapped in the bait stations would be separated from the burros and released. If it becomes impossible to separate the wildlife from the burros without harm, the trigger gate would be opened, allowing all the animals to escape. This would minimize potential animal injuries.

Reduced numbers of wild burros would lessen overall negative effects to wildlife from burro grazing and trampling. This would be most beneficial around the springs and riparian areas, as it would contribute to more favorable habitat. Long-term benefits include: 1) decreased grazing pressure and competition for water, forage and cover throughout the HA; 2) improvements in the plant community structure and ecosystem stability with increased species diversity (composition), vigor, and reproductive potential (seed production, germination and survival); 3) reduced disturbance to animals that depend on the riparian vegetation, such as nesting birds; and, 4) improvement in water quality for aquatic habitats.

16.1.2 RESIDUAL IMPACTS

Air Quality:

Residual impacts to air quality include an increase in dust emissions from vehicle activity and hydrocarbon and combustion emissions from internal combustion engines during the gathering operations. No long-term residual adverse effects on air resources are expected from the proposed action. The impacts are expected to occur during the duration of the proposed activity. Once the action is completed the site should return to pre-gather emission levels.

Threatened and Endangered Species

The primary impact of wild burros on desert tortoises is a reduction in the value of primary constituent elements that provide forage and shelter to the desert tortoise. Long-term residual benefits for desert tortoises would include: 1) improvement in the quality and quantity of forage species and the proper substrate conditions to provide for the growth of forage species; 2) reduction in compaction of substrates increasing the amount of habitat available for burrowing, nesting, and over wintering; and 3) increase in perennial vegetation available for thermal cover and for protection from predators.

Wild Free-Roaming Horses and Burros

The removed burros would be placed into the BLM's National Wild Horse and Burro Adoption Program as amended by Public Law 108-447. Once the adoption process is finalized the burros would not reproduce or may reproduce with burros outside the gene pool. The loss of the original herd's gene pool would be irretrievable when all burros are removed from the HA.

16.2 ENVIRONMENTAL CONSEQUENCES: No Action Alternative

Air Quality

If the burro population is not controlled there is potential for increased dust emissions from wind erosion due to the degradation of vegetation and an increased number of trails. The amounts expected to be generated are moderate and not expected to exceed of Federal or State Air quality standards.

Cultural Resources and Native American Religious Concerns

Existing impacts would continue. If the population of wild burros increases there is the potential for increased disturbances and alteration of cultural resources. Some of these non-renewable cultural resources would be damaged or destroyed. Also, burro trampling may impact sacred sites.

Ecological Critical Area

The DWMA effects are discussed below under Wildlife. Currently there is very little burro activity in the area where the Mesquite Lake ACEC is located. If the burro population is allowed to increase in the future there would be potential impacts to the Mesquite Lake ACEC by burros foraging on the mesquite beans.

Environmental Justice

No minority communities or low income communities are located within or adjacent to the proposed project areas. The no action would not impact distinct

Native American cultural practices or result in disproportionately high or adverse human health or environmental effects on minority communities.

Hazardous or Solid Waste

No impacts relating to hazardous or solid wastes would occur in association to the no action alternative.

Health and Safety

No impacts relating to public health and safety would occur in association to the no action alternative.

Livestock Grazing

If burros are not managed by removal then there is potential that as the burro population increases there would be a corresponding increase in forage consumption. As forage availability decreases it may become necessary to temporarily reduce the number of cattle grazing or shorten the length of time cattle are authorized to graze on the Clark Mountain Allotment to avoid an increase in impacts to the vegetative resources. If cattle reductions become necessary there will be an economic impact to the lessee of the Clark Mountain Allotment.

Recreation

The no action alternative may result in the increase of the burro population and would have potential impacts on recreational activities in the Clark Mountain area. A larger burro herd would add to dung piles on the lake beds, multiply the possibility of safety issues related to human / burro and vehicle / burro confrontations, and contribute to additional trails and dirt wallows formations that encourage illegal OHV use.

Soils

If the burro population increases there may be a corresponding decline in soil productivity due to compaction and reduced water retention capability that would lead to increased gully and sheet erosion.

Surface and Ground Water Quality

If the burro population increases, the rate of utilization, contamination and soil disturbance at watering sites would increase. Some springs may be rendered unusable. The availability of water for wildlife and cattle would decrease.

Wilderness

Under this alternative, excess numbers of wild burros would not be removed and burro populations would likely increase. Wilderness values would not be affected by helicopter or wrangler burro herding and capture activities. Overpopulation of wild burros and competition for forage would, according to the rangeland management specialist, contribute to a deterioration of the rangeland. A decline in range conditions throughout the HMA would affect the vegetative communities -- contributing to a decline in the naturalness of the wilderness areas. Burro impacts such as trailing and wallows would continue under this alternative.

Wild Free-Roaming Horses and Burros

If burros are not managed there would be potential increases in the burro population. As the burro population increases, herds would expand to a point that degradation to the range resources may cause the animals to either disperse into other desert habitats, carrying with it the problems associated with an unmanaged herd, or become so malnourished and dehydrated that the animals would suffer. Burros and wildlife would be competing for resources, increasing the risk of deaths to both burros and wildlife.

Wildlife

Threatened and Endangered Species

The impacts to critical desert tortoise habitat including loss of vegetation cover, litter, and soil compaction, would continue. The condition of primary constituent elements of critical habitat would continue to decline as a result of overgrazing by burros. These impacts are most evident in areas, such as the west side of Ivanpah Dry Lake, where as many as 40 burros have been seen at one time. The Biological Opinion for the CDCA plan as amended by NEMO analyzed the impacts of eliminating the burros from this HA (biological opinion, pages 144-145). The BO stated that "removal of burros from this area constitutes an important action to promote the survival and recovery of the desert tortoise." The no action alternative "may affect" the desert tortoise and its critical habitat.

General Wildlife

The no action alternative would allow the number of burros within the Clark Mountain HA and surrounding area to continue to increase. The result would be an increase in negative effects to wildlife from burro grazing and trampling. The impact would be greatest around the springs and riparian areas. Long-term impacts would include: 1) increased grazing pressure and competition for water, forage and cover throughout the HA; 2) changes to the plant community structure and ecosystem stability with decreased species diversity (composition), vigor, reproductive potential (seed production, germination and survival); 3) increased and prolonged disturbance to animals that depend on the riparian vegetation, such as nesting birds; and, 4) decline in water quality for aquatic habitats.

Vegetation

Adoption of the no action alternative would result in the continuation of adverse impacts to vegetation until excess burro numbers are reduced. Impacts would include continued loss of plant vigor and native seedling establishment. Long-term impacts would include loss of species richness (i.e. loss or decreased plant life from some sites) and loss of soil due to trailing, wallowing, and improper use (excess defecation, branch breaking, bark stripping, bud nipping). Adverse impacts, both short and long term, include decreased vegetation (for forage, shelter, reseeding) due to heavy grazing pressure, and compaction of the soils, decreasing reseeding potential.

Invasive/non-native

If the burro population increases there would be an increased potential for invasive/non-native species to have greater impacts to the native plant community. The invasive/non-native species may increase or become established in new areas as the native vegetation is reduced by burros grazing and trampling vegetation.

Special Status

Same as proposed action

Unusual Plant Assemblages (UPAs)

If the burro population increases burros may impact the shadescale UPA with increased grazing and trampling.

17. CUMULATIVE IMPACTS

Cumulative impacts, as defined by Council of Environmental Quality regulations in 40 CFR 1508.7, are “the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or persons undertakes such other actions.”

The NEMO plan amendment described the current environment of the planning area as having been broadly influenced by past activities occurring prior the passage of the Federal Land Policy and Management Act in 1976 (FLPMA), such as development of major highways, railroads, and communities in the region. Other important activities related to the baseline condition of the planning area have included mining, military use, recreation, reality actions, wildfire, actions related to Mojave National Preserve, and livestock grazing. The NEMO plan amendment further addressed recent and reasonably foreseeable future changes in land use resulting from the FLPMA and other resource management related

laws, including State and Federal Endangered Species Acts and the California Desert Protection Act.

The BLM's multiple use mission typically results in a variety of activities that are authorized to occur on the same lands

The wild burro was first introduced into the Desert Southwest by Spaniards in the 1500s. With the discovery of more gold and silver in the 1800's, miners brought more burros with them. The lone prospector and his trusty pack burro became a legendary symbol of the old west. In the barren hills where very little water is found, the burro adapted well and became indispensable to prospectors. When the ore played out, the mines were shut down and the mining camps were abandoned and became ghost towns. Many more burros escaped or were released during the settlement of the West. Because of their hardiness, wild burros have thrived throughout the North American deserts. They have relatively high reproductive rates, low incidence of disease, and few natural predators.

Over time burros multiplied to the point that they were out-competing native wildlife and overgrazing rangelands. Throughout the western United States, overpopulation of wild burros resulted in degradation of the desert ecosystem including impact to soils, native plant and animal communities, water quality and cultural resources. Congress recognized these issues and established the parameters for management through Public Law 92-195, Wild Free-Roaming Horse and Burro Act of December 15, 1971, (Act) as amended by the Federal Land Policy and Management Act of 1976, the Public Rangelands Improvement Act of 1978 and the New Sale Authority, Section 142 of Public Law 108-447 of 2004 as amended by Public Law 108-447, which directs the BLM to sell "without limitation" animals that are more than 11 years old or that have been passed over for adoption at least three times.

There has been some genetic analysis work done by Dr. Gus Cothran from the University of Texas A&M who is continuing to study the genetics of burro populations of the west. Cumulative reductions in habitat available for burros and subsequent reductions in burro populations, resulting in reduced representation of this species has likely compromised their gene pool. The ability for populations to maintain genetically viable herds, with representation of their unique genetic characteristics would be lost.

Past activities include recreational off-highway vehicle (OHV) use, development, operation and maintenance of utility and energy facilities and corridors (e.g., electricity and natural gas transmission lines), livestock grazing, military training maneuvers, construction and vehicle use of paved and unimproved roads, prospecting and mining, grazing, and wildlife water developments.

Present activities include prospecting and mining, off-highway vehicle use, grazing, utility facilities (e.g., electricity and natural gas transmission lines),

general recreation (e.g., hunting, picnicking, camping, and rock hounding), scientific study, and off-highway vehicle activities. With the passage of the Desert Protection Act of 1994 and California state law requiring backfilling of open pit hard rock mines, prospecting and mining interest has dwindled to only the occasional small miner. Mining prospects generally now disturb less than two acres with only a handful intermittently active.

Future activities may include development of range improvements, continued grazing, authorized and unauthorized vehicle use, maintenance and construction of utility facilities, and the location of additional mining claims. Less than ten plans of operation for small mining operations (less than 2 acres each) are anticipated during the next twenty years in the area.

18. CONSULTATION

On March 31, 2005, the USFWS issued a new Biological Opinion for the California Desert Conservation Area Plan [Desert Tortoise] (1-8-04-F-43R). The terms and conditions and reasonable and prudent measures regarding gathering wild burros are incorporated into the proposed action. The Service's BO concluded that implementation of the CDCA Plan, as modified by NEMO, is not likely to jeopardize the continued existence of the desert tortoise and is not likely to destroy or adversely modify the critical habitat of the desert tortoise. The BO extended the exemption for incidental take throughout public lands within appropriate desert wildlife management areas for the management of burros.

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20. NOTIFICATION

Notification of the proposed action and analysis has been prominently posted in the Needles Field Office public area and on the Field Office web site during the environmental review process. Both the public area posting and the office web site home page note that public participation is the cornerstone of the National Environmental Policy Act process and encourage public involvement in the office's review of uses proposed on public lands. The web site main page provides a link to projects currently under environmental review. No public comments as a result of the project's notification.

APPENDIX A Map

APPENDIX B

**SPILL PREVENTION, CONTROL AND COUNTERMEASURES PLAN FOR REMOTE
FUELING FOR HELICOPTER PROJECT WORK FOR THE RECONAISANCE,
CENSUS, TRACKING, CAPTURE AND REMOVAL OF WILD HORSES AND
BURROS
FISCAL YEAR 2005**

The purpose of this Spill Prevention and Countermeasures (SPCC) plan is to prevent the spillage of aviation gas on the premises of the heli-spot where the helicopter will land for refueling and what type of actions to take if an occurrence should happen.

Preparation of this plan is pursuant to 40 CFR 112, Oil Pollution Prevention, which establishes procedures, methods and equipment and other requirements for equipment to prevent the discharge of oil that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States.

Definitions:

A *discharge* includes but is not limited to, any spilling, leaking, pumping pouring, emitting, emptying, or dumping into the environment, unless regulated by specific permit (40 CFR 112, @112.2).

Oil is considered to be the generic term for hydrocarbons that includes oil, gasoline, diesel, hydraulic fluid, grease, sludge, oil refuse, and oil mixed with other wastes (40 CFR 112, @112.2).

Petroleum, under California law, is defined as crude oil, or any fraction thereof, which is liquid at 60 degrees Fahrenheit and 14.7 pounds per square inch absolute pressure (CAPSA, @25270.2(g)).

Release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, escaping, leaching, or disposing into the environment (CAPSA, @25270.2 (l)).

A *spill* is the unplanned discharge of any quantity of hazardous material to the environment. In this plan, spill event means a discharge of oil into or upon waters of the State (Waters of the State means any surface water or groundwater, including saline waters, within the boundaries of the State of California (Cal. Code, Div. 7, Ch 2, @13050 (e)) and any ground surfaces.

Project Description:

Helicopters are routinely used in remote areas to conduct project work for the wild horse and burro program which involves the reconnaissance, census, tracking, capture and removal of wild horses and burros. It is typically not conducive for the helicopter to fly to the nearest airport for refueling, due to the need for coordination with the ground crews, flight following by ground crews becomes more problematic and is more efficient manner of expediting the project work at a lower cost to the Government.

The capacity of the fuel trucks would range from 150 -350 gallons.

Prevention and Control of Oil Spills:

The Contractor and/or Helicopter Flight Manager will be responsible for assuring the preventive measures, inspection procedures, containment, and disposal of cleanup materials, gravel, soil and debris have been designed to comply with the requirements defined in 40 CFR @112.7. The fuel truck and helicopter fuel tank(s) and lines will be

inspected daily for leaks. Fuel truck tender will remain attentive to the helicopter fuel tank level to prevent tank overfills.

In the event of a spill, the major concern is to protect soils from saturation and migration to water sources (surface water and ground water). Attempts to stop the spill source and contain runoff, such as diking, will be made. Rapid containment and sorption are the most important factors in handling such spills. Once spillage is controlled, appropriate response to clean up will be conducted. Leaks or fuel spills occur that are confined to small areas will be cleaned up as part of the standard operating procedures. The mobile service truck is equipped with a quantity of absorbent pads for cleanup of localized spills. Burlap garbage bags will be on sight for placement of any contaminated soils, which will be disposed in accordance with State and local laws. Spill events greater than 10 gallons will be reported immediately to the Hazardous Material Specialists. Spill events greater than 25 gallons, the Environmental Department would be notified. These larger spill events may require the use of larger mechanized equipment to remove contaminated soils.

If considered a potential groundwater contamination problem, monitoring wells should be installed to determine the extent of fuel dispersal in the groundwater. If groundwater is contaminated, then fuel must be removed with recovery wells or trenches and the water/fuel mixture taken to a disposal area by a licensed hazardous waste hauler.

Refueling would not occur within a half a mile from any surface waters, unless the service truck is equipped with catchment basins or site is prepped to divert any spillage to a containment area. If surface water is contaminated a suction pump may be used to remove fuel or a commercial skimmer may remove fuel mechanically. If neither of these methods is feasible, incineration may be used with the approval of state and federal agencies and fire control authorities.

Monitoring and Reporting:

All spill cleanup events will be reported by the Helicopter Flight Manager to the office of jurisdiction Hazardous Material Specialist.

A written report shall be prepared immediately after termination of a spill response and submitted to the Hazardous Material Specialist. The report will include:

- * Immediate health or environmental hazards (soil pollution, water pollution, etc.)
- * What, where, when and how spill happened.
- * Volume and concentration of spill.
 - * Organization of the response.
 - * Resources used.
 - * Disposition of contaminated media and chemicals/materials used in the cleanup.
 - * Recommendations.